

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Stephan Schinzel-Kolb et al. Art Unit : 2875
Serial No. : 10/587,271 Examiner : Anabel Ton
Filed : May 7, 2007 Conf. No. : 4877
Title : DEFORMABLE ILLUMINATION MODULE

MAIL STOP AF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request review of the outstanding claims rejections by a panel of Examiners because the rejections of record are clearly improper.

Claims 1-18 are pending, with claims 1 and 10 in independent form. Claims 1-6 and 9-16 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Sloan et al. (U.S. Patent No. 6,932,495, “Sloan”). Claims 7, 8, and 17 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sloan. A non-final Office Action in this application issued on December 5, 2008. In response, Applicants filed an Office Action reply on April 6, 2009, and a supplemental Amendment on May 14, 2009. A Final Office Action then issued on September 14, 2009.

In Applicants’ Office Action reply of April 6, 2009, independent claim 1 was amended and new independent claim 10 was added. Applicants argued in the Office Action reply that both amended claim 1 and new claim 10 were patentable over Sloan. The Final Office Action maintained the rejection of independent claim 1, and newly rejected independent claim 10.

However, in making the rejection, the Final Office Action failed to address or even acknowledge the newly added limitations of claim 1. Instead, the Final Office action merely copied verbatim the rejection of claim 1 from the prior non-final Office Action (see Final Office Action at page 2). At present, claim 1 covers illumination modules where “each of the electrical power supply wires is a continuous wire that forms a single electrical contact to each of the plurality of circuit boards,” and Applicants believe – and have previously pointed out – that Sloan neither discloses nor suggests such power supply wires. The Final Office Action neglects to provide any indication of where these features of claim 1 are purportedly disclosed in Sloan.

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Similarly, the Final Office Action fails to indicate how Sloan allegedly anticipates the subject matter of independent claim 10. The rejection of claim 10 consists only of a literal copy of the language of claim 10, with no reference to Sloan or any other discussion thereof (*see* Final Office Action at page 3). At present, claim 10 covers illumination modules in which a plurality of circuit boards “are connected into a chain by way of two electrical power supply wires” that are ‘configured to run without interruption across all circuit boards of the chain’ and to “run along opposite edges of each of the circuit boards.” Applicants have previously pointed out that Sloan neither discloses nor suggests these features. The Final Office Action rejects claim 10, but provides no indication as to where or how Sloan allegedly discloses these or other features of claim 10.

The only acknowledgment of Applicants’ prior arguments in the Final Office Action is the statement that “Applicant argues ‘claim 10 is patentable over Sloan and claims 11-18 [are] dependent from claim 10 [and] are at least allowable for the same reasons as claim 10’ … [f]or the reasons stated above, the claims are still considered rejected and the rejection is made final” (*see* Final Office Action at page 4). But the Final Office Action fails to properly address each of the specific limitations of claim 1 and claim 10, as explained above. Instead, it appears the Final Office Action has merely considered Applicants’ remarks made in connection with the Amendment of May 14, 2009, but has not addressed Applicants’ claim amendments and remarks made in connection with the Office Action reply of April 6, 2009.

The Office’s own guidelines state that “the examiner’s action will be complete as to all matters” (MPEP § 707.07). As part of a complete examination, “the particular part [of a reference] relied on must be designated as nearly as practicable … the pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified” (MPEP § 706, quoting 37 CFR § 1.104(c)). To sustain a rejection under 35 U.S.C. § 102, the reference applied “must teach every element of the claim” (MPEP § 2131).

The Final Office Action fails to comply with these requirements. The Action does not explain how Sloan allegedly teaches “every element” of claims 1 and 10 and in particular, provides no explanation as to the pertinence of Sloan with regard to the specific limitations of claims 1 and 10 discussed above. Thus, the Final Office Action fails to articulate proper rejections of the pending claims under 35 U.S.C. § 102(e), and Applicants respectfully submit that the rejections of claims 1-18 should therefore be withdrawn.

But even if Final Office Action had attempted to articulate rejections of claims 1 and 10 under 35 U.S.C. § 102(e) over Sloan that at least satisfied the Office's own formal guidelines, the rejections would still be clearly in error as to their substance. Specifically, claim 1 covers illumination modules that include circuit boards that are "connected into a chain" by "two electrical power supply wires" that "run without interruption across all circuit boards of the chain," where "each of the electrical power supply wires is a continuous wire that forms a single electrical contact to each of the plurality of circuit boards." As explained in Applicants' specification, the electrical power supply lines are "available in 'infinite' form [and] are stripped at certain intervals, and the circuit boards are connected at these locations to the otherwise continuous power supply lines" (Specification, page 4, lines 1-4).

Sloan describes a number of different embodiments of channel lighting systems, but does not disclose the claimed power supply lines in any of his embodiments. For example, in connection with his Figures 1 and 2, Sloan states that "[i]nput wires 28a, 28b are connected to the PCB 18 at connection points 32a, 32b" (Sloan, col. 4, lines 32-33), and "output wires 30a, 30b are connected at connection points 32c, 32d" (Sloan, col. 4, lines 33-34). Thus, neither Sloan's input wires nor his output wires are continuous wires that form a single electrical contact to each of the plurality of circuit boards, as claim 1 requires. To the contrary, Sloan's wires 28a/b and 30a/b only run between pairs of circuit boards – they are not *continuous across each of the circuit boards*. In fact, wires 28a/b terminate in male connectors 34 between Sloan's circuit boards, and wires 30a/b terminate in female connectors 36 between circuit boardss.

Figures 6 and 7 of Sloan provide similar disclosure. Input wires 76a/b and output wires 80a/b are connected to input connection points 78a/b and output connection points 78c/d "that are adjacent to connection points 78a, 78b" (Sloan, col. 5, lines 65-66). In other words, wires 76a/b and 80a/b in the embodiments of Figures 6 and 7 are not continuous across each of the circuit boards, but are instead modular and connected to the connection points of only a single circuit board. The other ends of these wires terminate in either male connectors 83 or female connectors 84.

Figures 10 and 11 in Sloan show embodiments without connectors. Nonetheless, Sloan still expressly teaches that "[e]ach unit also has input wires 117a, 117b and output wires 118a, 118b that are connected to adjacent input connection points 119a, 119b and output connection points 119c, 119d, respectively" (Sloan, col. 6, lines 36-39). That is, neither input wires 117a-b nor output wires

118a-b are continuous wires that form single electrical contacts to each of the circuit boards, as claim 1 requires.

In summary, none of the embodiments disclosed by Sloan includes two power supply wires that run without interruption *across all circuit boards* as continuous wires. Instead, Sloan's channel lighting systems are constructed from multiple modular lighting units, each of which includes separate input and output power supply wires that connect (at most) two circuit boards only. In other words, if Sloan's systems include n circuit boards, then at least $2(n-1)$ connecting wires (or more) are needed to fully electrically connect all of his circuit boards in a chain. In contrast, claim 1 requires that the plurality of circuit boards "are connected into a chain by way of two electrical power supply wires." It also follows therefore that none of Sloan's wires forms a single electrical contact *to each of the plurality of circuit boards*. Sloan simply fails to disclose these features of claim 1, and therefore the Final Office Action's rejection of claim 1 under 35 U.S.C. § 102(e) over Sloan is clearly in error.

Applicants now turn to claim 10, which covers illumination modules "that are connected into a chain by way of two electrical power supply wires" that "are configured to run without interruption across all circuit boards of the chain" and that "run along opposite edges of each of the circuit boards." As explained in Applicants' specification, such a configuration permits easier fastening of the circuit boards to surfaces due to the absence of back-side electrical contacts (Specification, page 4, lines 5-12), and helps to reduce the likelihood of short circuits.

Sloan fails to disclose these features of claim 10. First, as explained above in connection with claim 1, Sloan does not disclose two power supply wires that connect circuit boards into a chain and run without interruption across all circuit boards in the chain. Instead, Sloan discloses PCB units that have individual input and output wires that form connections between, at most, two different circuit boards. None of Sloan's embodiments include two continuous wires that run without interruption across all circuit boards in the chain, as claim 10 requires.

Second, Sloan's input and output wires do not run along *opposite edges* of his circuit boards, as claim 10 requires. Instead, in both embodiments that include molded connectors (*see, e.g., Sloan*, Figures 1, 2, 6, 7) and embodiments without molded connectors (*see, e.g., Sloan*, Figures 10 and 11), Sloan's power supply wires run *together* underneath his circuit boards, not along opposite edges of his circuit boards. Sloan states that his output wires in Figures 1-3 are "folded under the extrusion

20 and housed within the extrusion's bottom longitudinal cavity 40" (Sloan, col. 5, lines 13-15). Figure 5 shows "bottom longitudinal cavity 40 for housing the output cables when they are folded under the extrusion 20" (Sloan, col. 5, lines 39-41).

In another of Sloan's embodiments, Figure 9 shows an extrusion 74 that does not include a bottom longitudinal cavity for housing output wires, but "the output wires 80a and 80b pass under the PCB through channels 88a, 88b" (Sloan, col. 6, lines 12-14). Sloan states that "[t]he output wires 118a, 118b pass under each unit's PCB through the extrusion channels and pass directly to the input connection points of the next unit in the chain" (Sloan, col. 6, lines 40-43). Thus, in each of Sloan's embodiments, output wires pass together underneath his circuit boards, not on opposite sides of the circuit boards as claim 10 requires.

In summary, Sloan fails to disclose illumination modules connected into a chain by way of two electrical power supply wires, each of which runs without interruption across all circuit boards of the chain. Further, Sloan fails to disclose power supply wires that run along opposite edges of each of the circuit boards. It follows then that the Final Office Action's rejection of claim 10 under 35 U.S.C. § 102(e) over Sloan is clearly in error.

Without addressing the individual subject matter of each of dependent claims 2-9 and 11-18, each of these claims is patentable over Sloan by virtue of its dependence from either claim 1 or 10. Thus, the Final Office Action's rejections of these dependent claims under 35 U.S.C. §§ 102(e) and 103(a) over Sloan is also clearly in error.

In conclusion, Applicants submit that the rejections of independent claims 1 and 10, and of the claims that depend therefrom, are improper and clearly in error. Applicants ask that these rejections be withdrawn and the claims allowed.

No fees are believed to be due. Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 12406-0214US1.

Respectfully submitted,

Date: December 14, 2009

/Marc M. Wefers Reg. No. 56,842/

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number: 12406-0214US1
<p>I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, Box 1450, Alexandria, VA 22313-1450.</p> <hr/> <p>Date of Deposit</p> <hr/> <p>Signature</p> <hr/> <p>Typed or Printed Name of Person Signing Certificate</p>	Application Number 10/587,271	Filed May 7, 2007
	First Named Inventor Stephan Schinzel-Kolb et al.	
	Art Unit 2875	Examiner Anabel Ton

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

- applicant/inventor.
- assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)
- attorney or agent of record 56,842
(Reg. No.)
- attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34

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December 14, 2009

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below'.

Total of 3 forms are submitted.